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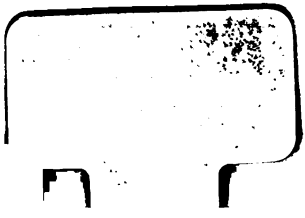

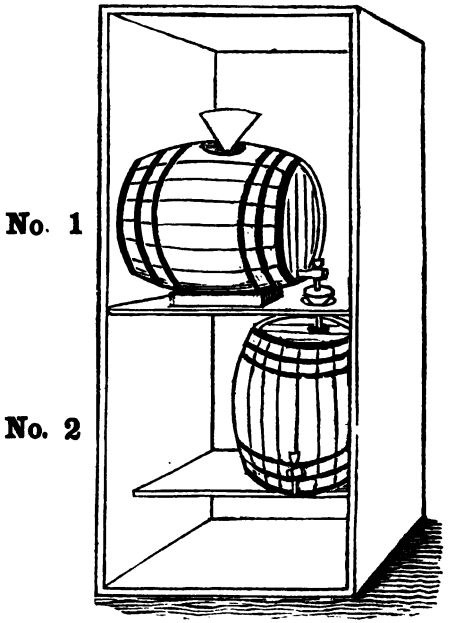

This diagram will shew a convenient method of arranging two Eighteen-gallon Casks, as likewise the little room they will occupy.

INSTRUCTIONS

FOR

BREWING

PORTER & STOUT

AT

An expense of 4d. & 5d. per Gallon.

BY

CHAS CLARKSON,

MANY YEARS PRACTICAL PRIVATE BREWER.

Published by the Author, at

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INSTRUCTIONS

FOR

BREWING.

Procure two casks, No. 1 and No. 2, of a capacity to hold a month's consumption of beer, and put a wooden tap into each; let the bung-hole in No. 1 be about four inches in diameter; put the casks in a convenient place, and commence brewing in the following manner:—

Fill your copper about two-thirds with water, and put in four quarts of roasted bar-

ley, then light the fire, and let it come to a boil slowly; then put in twenty-seven pounds of best green treacle, one pound and a quarter of hops, and half an ounce of chips of quassia; stir it up till the treacle is well mixed with the liquor, and let it boil for two hours; then draw off about six gallons, strain it through a cullender, and pour it into your cask No. 1; fill the copper up again with water, and boil three or four hours longer; then strain off all the liquor that you can, and put it into the cask No. 1; put as much more water into the copper as will be sufficient to fill the cask and about one gallon over. As this last charge in the copper is merely to wash out the goods and obtain all the extract possible, it will be sufficient to just bring it to a boil; strain it as dry as you can, fill up the cask, stir the contents till it is well mixed, and draw off from the tap three gallons

of the wort into a stone bottle for a reserve. As soon as the wort in the cask is cooled down to be just warm, it will be proper to ferment, which must be done as follows :— Get two pounds of good yeast, put it into a pan or other vessel, mix it well with about one gallon of the wort while it is quite warm, and set it in a warm place till it is in a state of brisk fermentation, then pour it into the cask, and mix it well with the rest of the wort: in a few hours it will be in full work. It should now be stirred up twice a day to promote the fermentation; on the fourth day the cask must be filled up with the reserved wort, and the yeast allowed to flow freely from the bung-hole into a vessel placed at the side of the cask; at the end of a week draw it off as fine as possible from the dregs, into the other cask, No. 2, and fill it up with the reserved wort; the bung-hole in

this cask must be left open till no yeast rises, then put in a few hops and bung it up, and in one month from the time it was brewed it will be fit to drink.

After drawing off all the clear liquor from the cask No. 1, pour out the dregs and put it into a stone bottle to settle, as full one-half of that will be clear liquor, and serve as a reserve to mix with future brewings; rinse out the cask, and brew again; proceed exactly the same as at first, but, this time, and in future brewings, the fermentation may finish in the cask No. 1, observing to fill up the cask on the fourth day, and keep it well filled every day till no more yeast rises; it must then be bunged up till No. 2 cask is empty, when it must be drawn off into the cask No. 2, and will be fit to drink immediately. As there will be a little settling in

the cask No. 2, it should be rinsed out and drained every time it is empty, before filling again.

Beer brewed according to these directions will very much resemble the best London porter in flavour, with great strength, (the wort produced being of gravity 1·066, or 24 lb. per barrel, equal to that usually allowed for brown stout). It will draw off to the last without getting flat, while the success of the operation is reduced to a certainty without the need of those cumbrous and expensive utensils, the mash tub, coolers, fermenting tub, &c., the great labour and skill required for the extraction of all the saccharine matter from malt being entirely obviated, the saccharine being ready formed, and neither is any danger from acidity to be apprehended.

I have given here the quantities of materials for brewing eighteen gallons at a time. Larger or smaller quantities can be made by the same rule, and for small quantities, say four and a half gallons at a time, a large kettle will do as well as a copper. The expense will not be more than 5d. per gallon, at the present price of materials, usually it is much less:—

	s.	d.
27 lb. treacle, at 20s. per cwt.	4	10
1¼ lb. hops, at 1s. 2d. per lb	1	5½
4 quarts roasted barley	0	8
Yeast 2d., and quassia ½d.	0	3½
	7	3
18 gallons beer, at 5d.....	7	6
	0	3

The superiority of this system of brewing is not confined to cheapness, but, added to the economy of time, labour, and space, the certainty of producing a uniform article at all seasons is an object of great importance, and scarcely attainable in small brewings when malt is used.

Its resemblance to porter may be accounted for from the fact that the component parts of each are the same, viz.—saccharum, burnt saccharum, roasted grain, and extract of hops; the only difference, if any, can only be in flavour, and that so imperceptible that it amounts to no difference at all, as all the public brewers produce an article different in flavour from each other.

Quassia is a pure and lasting bitter, is perfectly wholesome, in fact, it is recom-

mended by the faculty as a stomachic; the small quantity here recommended does not produce a predominant flavour, whilst as a substitute, it is equal to about one pound of hops.

Barley can be very conveniently roasted in a frying-pan, observing to occasionally shake or stir it till it is of a dark brown colour.

The best way to obtain roasted barley is to purchase three pecks of best barley, and have it roasted by a coffee-roaster, and tell him to roast it as brown as he can without burning: this requires no bruising, as it will dissolve to a pulp in the copper. The cost for the barley will not be more than three shillings, and the roasting nine pence, which is less than two pence per quart

Emigrants will find these instructions of considerable value and importance, quassia being the only article they need take out, which is neither bulky nor expensive, (1s. per lb.) They can commence brewing as soon as they can procure a couple of casks. Barley can be obtained almost anywhere, and if treacle is not easy to get, sugar will do as well, and in most places is very reasonable in price; if hops cannot be got, they can be dispensed with altogether, and a very good and palatable article can be made by means of roasted barley and quassia, using judgment in proportioning the quantities.

I use neither thermometer nor saccharometer, neither do I think they are necessary in small brewings; the heat of the wort at the time of putting in the yeast being the

only matter of importance, which is soon arrived at by practice, always observing it should be rather too warm than too cold, as the internal motion of the liquor will not much increase its temperature, but it will soon fall to the same degree of heat as the surrounding atmosphere, therefore it is prudent to fill up the cask and allow the yeast to be discharged quite as soon as the time I have named, or even before if you find on tasting it that the sweetness is sufficiently gone off.

The way I arrive at the gravity, is this:— I weigh a wine bottle accurately, which in this instance is twenty-four ounces and three quarters; I then fill the bottle with water, which then weighs fifty-one ounces and a quarter; I then empty the bottle and fill it with wort, made as exactly as before

directed, which then weighed fifty-three ounces. A bottle of wort therefore is one ounce and three quarters heavier than the same quantity of water, or eleven ounces to a gallon, which, multiplied by thirty-six, gives a gravity of twenty-four pounds and three quarters per barrel of thirty-six gallons, a density usually allowed for stout.

By decimals the same result is obtained, thus:—a bottle of water weighs twenty-six ounces and a half, without the bottle; the same quantity of wort is twenty-eight ounces and a quarter; by dividing the larger quantity by the former, the following result is obtained, thus:—

26½ oz. water	28¼ oz. wort.
4	4
106	106) 113 (1·066

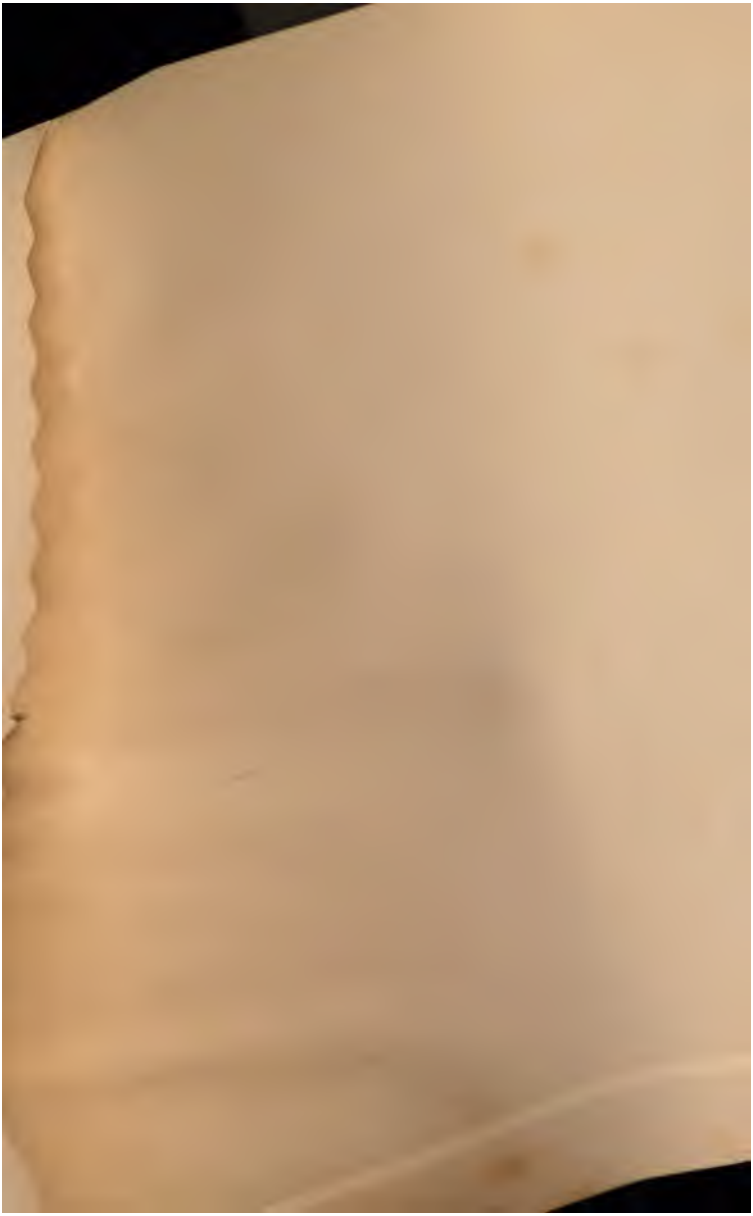
A gravity of 1·066 by Mr. Richardson's and Dr. Ure's tables, is a barrel of 24 lb. density, containing 60 lb. of fermentable matter, the same as that usually allowed to brown stout.

As this article may be stronger than some people like, I here give the quantities for beer of a gravity of 18 lb. to the barrel, the same as used for porter :—

		s.	d.
Treacle	21 lb.	3	9
Roasted barley	3 qts.	0	6
Hops	1 lb.	1	2
Quassia	half oz.	0	0½
Yeast	1½ lb.	0	2
		5	7½

Or less than 4d. per gallon.

Should there be any difficulty in procuring the above-mentioned articles at the prices here stated, I will undertake to supply any quantities upon receipt of cash or post-office order for the amount: carriage must be paid by the purchaser.

If there is anything in these directions that parties brewing by them do not perfectly understand, or if the article they produce is not to their entire satisfaction, if they will write to me upon the subject, I shall feel a pleasure in giving them any further information that is in my power, *without charge.*

CHAS. CLARKSON.